Robert J Wood

List of Publications by Year
in descending order

245 papers	24,457 citations	20759 60 h-index	11030 137 g-index
251 all docs	251 docs citations	251 times ranked	15199 citing authors

#	Article	IF	Citations
1	An integrated design and fabrication strategy for entirely soft, autonomous robots. Nature, 2016, 536, 451-455.	13.7	1,557
2	Embedded 3D Printing of Strain Sensors within Highly Stretchable Elastomers. Advanced Materials, 2014, 26, 6307-6312.	11.1	1,314
3	Soft robotic glove for combined assistance and at-home rehabilitation. Robotics and Autonomous Systems, 2015, 73, 135-143.	3.0	1,168
4	A Resilient, Untethered Soft Robot. Soft Robotics, 2014, 1, 213-223.	4.6	885
5	Controlled Flight of a Biologically Inspired, Insect-Scale Robot. Science, 2013, 340, 603-607.	6.0	873
6	A 3D-printed, functionally graded soft robot powered by combustion. Science, 2015, 349, 161-165.	6.0	802
7	The grand challenges of <i>Science Robotics</i>. Science Robotics, 2018, 3, .	9.9	787
8	The First Takeoff of a Biologically Inspired At-Scale Robotic Insect. IEEE Transactions on Robotics, 2008, 24, 341-347.	7.3	745
9	Untethered soft robotics. Nature Electronics, 2018, 1, 102-112.	13.1	704
10	Design and Fabrication of Soft Artificial Skin Using Embedded Microchannels and Liquid Conductors. IEEE Sensors Journal, 2012, 12, 2711-2718.	2.4	632
11	Soft Robotic Grippers for Biological Sampling on Deep Reefs. Soft Robotics, 2016, 3, 23-33.	4.6	624
12	Meshworm: A Peristaltic Soft Robot With Antagonistic Nickel Titanium Coil Actuators. IEEE/ASME Transactions on Mechatronics, 2013, 18, 1485-1497.	3.7	536
13	Fluid-driven origami-inspired artificial muscles. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13132-13137.	3.3	499
14	Controlled flight of a microrobot powered by soft artificial muscles. Nature, 2019, 575, 324-329.	13.7	460
15	Hyperelastic pressure sensing with a liquid-embedded elastomer. Journal of Micromechanics and Microengineering, 2010, 20, 125029.	1.5	418
16	Soft Somatosensitive Actuators via Embedded 3D Printing. Advanced Materials, 2018, 30, e1706383.	11.1	398
17	Wearable soft sensing suit for human gait measurement. International Journal of Robotics Research, 2014, 33, 1748-1764.	5.8	325
18	Untethered flight of an insect-sized flapping-wing microscale aerial vehicle. Nature, 2019, 570, 491-495.	13.7	322

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19	Jumping on water: Surface tensionâ€"dominated jumping of water striders and robotic insects. Science, 2015, 349, 517-521.	6.0	306
20	Batch Fabrication of Customizable Siliconeâ€Textile Composite Capacitive Strain Sensors for Human Motion Tracking. Advanced Materials Technologies, 2017, 2, 1700136.	3.0	301
21	An Origami-Inspired Approach to Worm Robots. IEEE/ASME Transactions on Mechatronics, 2013, 18, 430-438.	3.7	289
22	A Soft Strain Sensor Based on Ionic and Metal Liquids. IEEE Sensors Journal, 2013, 13, 3405-3414.	2.4	288
23	Ultra-sensitive and resilient compliant strain gauges for soft machines. Nature, 2020, 587, 219-224.	13.7	279
24	Realizing the potential of dielectric elastomer artificial muscles. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2476-2481.	3.3	276
25	Masked Deposition of Galliumâ€Indium Alloys for Liquidâ€Embedded Elastomer Conductors. Advanced Functional Materials, 2013, 23, 5292-5296.	7.8	248
26	Design and Characterization of a Soft Multi-Axis Force Sensor Using Embedded Microfluidic Channels. IEEE Sensors Journal, 2013, 13, 4056-4064.	2.4	240
27	Self-folding with shape memory composites. Soft Matter, 2013, 9, 7688.	1.2	236
28	Self-folding origami: shape memory composites activated by uniform heating. Smart Materials and Structures, 2014, 23, 094006.	1.8	236
29	Robotic Artificial Muscles: Current Progress and Future Perspectives. IEEE Transactions on Robotics, 2019, 35, 761-781.	7.3	225
30	Pneumatic Energy Sources for Autonomous and Wearable Soft Robotics. Soft Robotics, 2014, 1, 263-274.	4.6	215
31	Driving high voltage piezoelectric actuators in microrobotic applications. Sensors and Actuators A: Physical, 2012, 176, 78-89.	2.0	206
32	A biorobotic adhesive disc for underwater hitchhiking inspired by the remora suckerfish. Science Robotics, 2017, 2, .	9.9	200
33	The principles of cascading power limits in small, fast biological and engineered systems. Science, 2018, 360, .	6.0	187
34	Ultragentle manipulation of delicate structures using a soft robotic gripper. Science Robotics, 2019, 4, .	9.9	186
35	Multilayer Dielectric Elastomers for Fast, Programmable Actuation without Prestretch. Advanced Materials, 2016, 28, 8058-8063.	11.1	185
36	A biologically inspired, flapping-wing, hybrid aerial-aquatic microrobot. Science Robotics, 2017, 2, .	9.9	159

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37	Compact Dielectric Elastomer Linear Actuators. Advanced Functional Materials, 2018, 28, 1804328.	7.8	157
38	Tunable elastic stiffness with microconfined magnetorheological domains at low magnetic field. Applied Physics Letters, 2010, 97, .	1.5	135
39	A Vacuum-driven Origami â€œMagic-ballâ€•Soft Gripper. , 2019, , .		130
40	Textile Technology for Soft Robotic and Autonomous Garments. Advanced Functional Materials, 2021, 31, 2008278.	7.8	127
41	An untethered jumping soft robot. , 2014, , .		124
42	A Dexterous Soft Robotic Hand for Delicate In-Hand Manipulation. IEEE Robotics and Automation Letters, 2020, 5, 5502-5509.	3.3	124
43	Soft curvature sensors for joint angle proprioception. , 2011, , .		121
44	Inverted and vertical climbing of a quadrupedal microrobot using electroadhesion. Science Robotics, 2018, 3, .	9.9	116
45	Origami-Inspired Printed Robots. IEEE/ASME Transactions on Mechatronics, 2015, 20, 2214-2221.	3.7	112
46	Power and Control Autonomy for High-Speed Locomotion With an Insect-Scale Legged Robot. IEEE Robotics and Automation Letters, 2018, 3, 987-993.	3.3	111
47	High speed locomotion for a quadrupedal microrobot. International Journal of Robotics Research, 2014, 33, 1063-1082.	5.8	110
48	Wearable tactile keypad with stretchable artificial skin. , 2011, , .		108
49	Towards printable robotics: Origami-inspired planar fabrication of three-dimensional mechanisms. , 2011, , .		106
50	The milliDelta: A high-bandwidth, high-precision, millimeter-scale Delta robot. Science Robotics, 2018, 3, .	9.9	105
51	First controlled vertical flight of a biologically inspired microrobot. Bioinspiration and Biomimetics, 2011, 6, 036009.	1.5	104
52	A review of actuation and power electronics options for flapping-wing robotic insects. , 2008, , .		101
53	Robot self-assembly by folding: A printed inchworm robot. , 2013, , .		100
54	Controlling free flight of a robotic fly using an onboard vision sensor inspired by insect ocelli. Journal of the Royal Society Interface, 2014, 11, 20140281.	1.5	98

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55	Adaptive control of a millimeter-scale flapping-wing robot. Bioinspiration and Biomimetics, 2014, 9, 025004.	1.5	98
56	A Modular Soft Robotic Wrist for Underwater Manipulation. Soft Robotics, 2018, 5, 399-409.	4.6	98
57	A Dexterous, Glove-Based Teleoperable Low-Power Soft Robotic Arm for Delicate Deep-Sea Biological Exploration. Scientific Reports, 2018, 8, 14779.	1.6	98
58	A Wearable Soft Haptic Communicator Based on Dielectric Elastomer Actuators. Soft Robotics, 2020, 7, 451-461.	4.6	93
59	A Highly Stretchable Capacitiveâ€Based Strain Sensor Based on Metal Deposition and Laser Rastering. Advanced Materials Technologies, 2017, 2, 1700081.	3.0	90
60	Origami-inspired miniature manipulator for teleoperated microsurgery. Nature Machine Intelligence, 2020, 2, 437-446.	8.3	89
61	Soft wearable motion sensing suit for lower limb biomechanics measurements. , 2013, , .		87
62	Controllable water surface to underwater transition through electrowetting in a hybrid terrestrial-aquatic microrobot. Nature Communications, 2018, 9, 2495.	5.8	86
63	Addressable wireless actuation for multijoint folding robots and devices. Science Robotics, 2017, 2, .	9.9	83
64	Undulatory Swimming Performance and Body Stiffness Modulation in a Soft Robotic Fish-Inspired Physical Model. Soft Robotics, 2017, 4, 202-210.	4.6	82
65	A high speed soft robot based on dielectric elastomer actuators. , 2017, , .		80
66	Influence of surface traction on soft robot undulation. International Journal of Robotics Research, 2013, 32, 1577-1584.	5.8	74
67	A Review of Propulsion, Power, and Control Architectures for Insect-Scale Flapping-Wing Vehicles. Applied Mechanics Reviews, 2018, 70, .	4.5	73
68	Biocompatible Soft Fluidic Strain and Force Sensors for Wearable Devices. Advanced Functional Materials, 2019, 29, 1807058.	7.8	70
69	Design, fabrication, and modeling of the split actuator microrobotic bee. , 2012, , .		69
70	Increasing the Dimensionality of Soft Microstructures through Injectionâ€Induced Selfâ€Folding. Advanced Materials, 2018, 30, e1802739.	11.1	69
71	Multi-segment soft robotic fingers enable robust precision grasping. International Journal of Robotics Research, 2020, 39, 1647-1667.	5.8	69
72	Applicability of Shape Memory Alloy Wire for an Active, Soft Orthotic. Journal of Materials Engineering and Performance, 2011, 20, 658-662.	1.2	65

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73	Peristaltic locomotion with antagonistic actuators in soft robotics. , 2010, , .		63
74	Biologically-inspired locomotion of a 2g hexapod robot. , 2010, , .		62
75	Rotary-actuated folding polyhedrons for midwater investigation of delicate marine organisms. Science Robotics, 2018, 3, .	9.9	59
76	Shipboard design and fabrication of custom 3D-printed soft robotic manipulators for the investigation of delicate deep-sea organisms. PLoS ONE, 2018, 13, e0200386.	1.1	58
77	Fabrication and analysis of dielectric-elastomer minimum-energy structures for highly-deformable soft robotic systems. , 2010, , .		57
78	Deep Machine Learning Techniques for the Detection and Classification of Sperm Whale Bioacoustics. Scientific Reports, 2019, 9, 12588.	1.6	57
79	Active modular elastomer sleeve for soft wearable assistance robots. , 2012, , .		56
80	Myriapod-like ambulation of a segmented microrobot. Autonomous Robots, 2011, 31, 103-114.	3.2	55
81	Smart pneumatic artificial muscle actuator with embedded microfluidic sensing. , 2013, , .		55
82	Milligram-scale high-voltage power electronics for piezoelectric microrobots. , 2009, , .		54
83	Influence of cross-sectional geometry on the sensitivity and hysteresis of liquid-phase electronic pressure sensors. Applied Physics Letters, 2012, 101, .	1.5	54
84	An Additive Millimeterâ€Scale Fabrication Method for Soft Biocompatible Actuators and Sensors. Advanced Materials Technologies, 2017, 2, 1700135.	3.0	54
85	Biologically Inspired Optical-Flow Sensing for Altitude Control of Flapping-Wing Microrobots. IEEE/ASME Transactions on Mechatronics, 2013, 18, 556-568.	3.7	51
86	Design and manufacturing rules for maximizing the performance of polycrystalline piezoelectric bending actuators. Smart Materials and Structures, 2015, 24, 065023.	1.8	51
87	Experimental and computational studies of the aerodynamic performance of a flapping and passively rotating insect wing. Journal of Fluid Mechanics, 2016, 791, 1-33.	1.4	49
88	The flying monkey: A mesoscale robot that can run, fly, and grasp. , 2016, , .		45
89	A Modular Dielectric Elastomer Actuator to Drive Miniature Autonomous Underwater Vehicles. , 2018, , .		45
90	Perching with a robotic insect using adaptive tracking control and iterative learning control. International Journal of Robotics Research, 2016, 35, 1185-1206.	5.8	43

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91	Design, Fabrication, and Characterization of an Untethered Amphibious Sea Urchin-Inspired Robot. IEEE Robotics and Automation Letters, 2019, 4, 3348-3354.	3.3	43
92	Elastic Element Integration for Improved Flapping-Wing Micro Air Vehicle Performance. IEEE Transactions on Robotics, 2013, 29, 32-41.	7.3	42
93	Concomitant sensing and actuation for piezoelectric microrobots. Smart Materials and Structures, 2018, 27, 065028.	1.8	41
94	Stretchable circuits and sensors for robotic origami. , 2011, , .		40
95	HAMR3: An autonomous 1.7g ambulatory robot. , 2011, , .		39
96	Tunable Multi-Modal Locomotion in Soft Dielectric Elastomer Robots. IEEE Robotics and Automation Letters, 2020, 5, 3868-3875.	3.3	39
97	Mechanical and electrical numerical analysis of soft liquid-embedded deformation sensors analysis. Extreme Mechanics Letters, 2014, 1, 42-46.	2.0	38
98	Energetics of flapping-wing robotic insects: towards autonomous hovering flight. , 2010, , .		37
99	Model driven design for flexure-based Microrobots. , 2015, , .		37
100	Dynamics and flight control of a flapping-wing robotic insect in the presence of wind gusts. Interface Focus, 2017, 7, 20160080.	1.5	36
101	Ultrastrong and Highâ€Stroke Wireless Soft Actuators through Liquidâ€"Gas Phase Change. Advanced Materials Technologies, 2019, 4, 1800381.	3.0	36
102	Flexible, stretchable tactile arrays from MEMS barometers. , 2013, , .		35
103	Multilayer laminated piezoelectric bending actuators: design and manufacturing for optimum power density and efficiency. Smart Materials and Structures, 2016, 25, 055033.	1.8	35
104	Smart Thermally Actuating Textiles. Advanced Materials Technologies, 2020, 5, 2000383.	3.0	35
105	Body torque modulation for a microrobotic fly. , 2009, , .		34
106	An end-to-end approach to making self-folded 3D surface shapes by uniform heating. , 2014, , .		34
107	Self-folding and self-actuating robots: A pneumatic approach. , 2015, , .		34
108	Design of centimeter-scale inchworm robots with bidirectional claws. , 2011, , .		33

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109	Spiking neural network (SNN) control of a flapping insect-scale robot. , 2016, , .		33
110	An analytic framework for developing inherently-manufacturable pop-up laminate devices. Smart Materials and Structures, 2014, 23, 094013.	1.8	32
111	Gait studies for a quadrupedal microrobot reveal contrasting running templates in two frequency regimes. Bioinspiration and Biomimetics, 2017, 12, 046005.	1.5	32
112	Microrobotic laser steering for minimally invasive surgery. Science Robotics, 2021, 6, .	9.9	32
113	Stroke plane deviation for a microrobotic fly. , 2010, , .		31
114	Pop-up assembly of a quadrupedal ambulatory MicroRobot. , 2013, , .		31
115	A Low Mass Power Electronics Unit to Drive Piezoelectric Actuators for Flying Microrobots. IEEE Transactions on Power Electronics, 2018, 33, 3180-3191.	5.4	31
116	Soft artificial skin with multi-modal sensing capability using embedded liquid conductors. , 2011, , .		30
117	Biologically inspired electrostatic artificial muscles for insect-sized robots. International Journal of Robotics Research, 2021, 40, 895-922.	5.8	30
118	Open-loop roll, pitch and yaw torques for a robotic bee. , 2012, , .		29
119	Self-folding shape memory laminates for automated fabrication. , 2013, , .		29
120	A passive, origami-inspired, continuously variable transmission. , 2014, , .		29
121	A physical model of mantis shrimp for exploring the dynamics of ultrafast systems. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	29
122	Pitch-angle feedback control of a Biologically Inspired flapping-wing microrobot. , 2011, , .		28
123	Lift Force Control of Flapping-Wing Microrobots Using Adaptive Feedforward Schemes. IEEE/ASME Transactions on Mechatronics, 2013, 18, 155-168.	3.7	28
124	Passive undulatory gaits enhance walking in a myriapod millirobot. , 2011, , .		27
125	Non-linear resonance modeling and system design improvements for underactuated flapping-wing vehicles. , 2016, , .		27
126	An End-to-End Approach to Self-Folding Origami Structures. IEEE Transactions on Robotics, 2018, 34, 1409-1424.	7.3	27

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127	Inverted and Inclined Climbing Using Capillary Adhesion in a Quadrupedal Insect-Scale Robot. IEEE Robotics and Automation Letters, 2020, 5, 4820-4827.	3.3	26
128	Bio-inspired mechanisms for inclined locomotion in a legged insect-scale robot. , 2014, , .		25
129	Model-Free Control of a Hovering Flapping-Wing Microrobot. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 77, 95-111.	2.0	25
130	Echinoderm-Inspired Tube Feet for Robust Robot Locomotion and Adhesion. IEEE Robotics and Automation Letters, 2018, 3, 2222-2228.	3.3	25
131	Soft Curvature and Contact Force Sensors for Deep-Sea Grasping via Soft Optical Waveguides. , 2018, , .		25
132	Ultraâ€Lightweight, High Power Density Lithiumâ€Ion Batteries. Batteries and Supercaps, 2018, 1, 131-134.	2.4	25
133	A fluidic demultiplexer for controlling large arrays of soft actuators. Soft Matter, 2020, 16, 5871-5877.	1.2	25
134	Self-assembling sensors for printable machines. , 2014, , .		24
135	A wirelessly powered, biologically inspired ambulatory microrobot. , 2014, , .		24
136	Development of the Polipo Pressure Sensing System for Dynamic Space-Suited Motion. IEEE Sensors Journal, 2015, 15, 6229-6237.	2.4	24
137	Soft Sensing Shirt for Shoulder Kinematics Estimation. , 2020, , .		24
138	A dynamic electrically driven soft valve for control of soft hydraulic actuators. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	24
139	Mechanically Programmable Dip Molding of High Aspect Ratio Soft Actuator Arrays. Advanced Functional Materials, 2020, 30, 1908919.	7.8	24
140	Adaptive control for takeoff, hovering, and landing of a robotic fly. , 2013, , .		23
141	Pitch and yaw control of a robotic insect using an onboard magnetometer. , 2014, , .		23
142	Design and fabrication of an insect-scale flying robot for control autonomy. , 2015, , .		23
143	Contact-implicit trajectory optimization using variational integrators. International Journal of Robotics Research, 2019, 38, 1463-1476.	5.8	23
144	Scaling Up Soft Robotics: A Meter-Scale, Modular, and Reconfigurable Soft Robotic System. Soft Robotics, 2022, 9, 324-336.	4.6	23

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145	Piezoelectric Grippers for Mobile Micromanipulation. IEEE Robotics and Automation Letters, 2020, 5, 4407-4414.	3.3	23
146	Asymmetric flapping for a robotic fly using a hybrid power-control actuator. , 2009, , .		22
147	Biocompatible Pressure Sensing Skins for Minimally Invasive Surgical Instruments. IEEE Sensors Journal, 2016, 16, 1294-1303.	2.4	22
148	Self-Assembling, Low-Cost, and Modular mm-Scale Force Sensor. IEEE Sensors Journal, 2016, 16, 69-76.	2.4	22
149	Hybrid aerial and aquatic locomotion in an at-scale robotic insect. , 2015, , .		21
150	Feedback-controlled self-folding of autonomous robot collectives. , 2016, , .		21
151	Tension Pistons: Amplifying Piston Force Using Fluidâ€Induced Tension in Flexible Materials. Advanced Functional Materials, 2019, 29, 1901419.	7.8	21
152	A soft multi-axis force sensor. , 2012, , .		20
153	Smaller, Softer, Safer, Smarter Robots. Science Translational Medicine, 2013, 5, 210ed19.	5.8	20
154	HAMR3: An autonomous 1.7g ambulatory robot. , 2011, , .		20
155	A monolithic approach to fabricating low-cost, millimeter-scale multi-axis force sensors for minimally-invasive surgery. , 2014, , .		19
156	Effective locomotion at multiple stride frequencies using proprioceptive feedback on a legged microrobot. Bioinspiration and Biomimetics, 2019, 14, 056001.	1.5	19
157	Advances and future outlooks in soft robotics for minimally invasive marine biology. Science Robotics, 2022, 7, eabm6807.	9.9	19
158	Influence of wing morphological and inertial parameters on flapping flight performance. , 2016, , .		18
159	An insect-inspired collapsible wing hinge dampens collision-induced body rotation rates in a microrobot. Journal of the Royal Society Interface, 2019, 16, 20180618.	1.5	18
160	Lift force control of a flapping-wing microrobot. , 2011, , .		17
161	Microsurgical Devices by Pop-Up Book MEMS. , 2013, , .		17
162	Printing angle sensors for foldable robots. , 2015, , .		17

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163	Comparative analysis of fabrication methods for achieving rounded microchannels in PDMS. Journal of Micromechanics and Microengineering, 2016, 26, 115013.	1.5	17
164	Injection Molding of Soft Robots. Advanced Materials Technologies, 2022, 7, 2100605.	3.0	17
165	Powertrain selection for a biologically-inspired miniature quadruped robot. , 2014, , .		16
166	A putative chordate luciferase from a cosmopolitan tunicate indicates convergent bioluminescence evolution across phyla. Scientific Reports, 2020, 10, 17724.	1.6	16
167	Design and control of a parallel linkage wrist for robotic microsurgery. , 2015, , .		15
168	A Fully Integrated Battery-Powered System-on-Chip in 40-nm CMOS for Closed-Loop Control of Insect-Scale Pico-Aerial Vehicle. IEEE Journal of Solid-State Circuits, 2017, 52, 2374-2387.	3.5	15
169	Shearâ€Mode Contact Splitting for a Microtextured Elastomer Film. Advanced Materials, 2010, 22, 3700-3703.	11.1	14
170	Fly on the wall. , 2014, , .		14
171	Hybrid carbon fiber-textile compliant force sensors for high-load sensing in soft exosuits. , 2017, , .		14
172	Meso scale flextensional piezoelectric actuators. Smart Materials and Structures, 2018, 27, 015008.	1.8	14
173	Contact-Implicit Optimization of Locomotion Trajectories for a Quadrupedal Microrobot. , 0, , .		14
174	Turning gaits and optimal undulatory gaits for a modular centipede-inspired millirobot. , 2012, , .		13
175	Robustness of centipede-inspired millirobot locomotion to leg failures. , 2013, , .		13
176	Stabilizing air dampers for hovering aerial robotics: design, insect-scale flight tests, and scaling. Autonomous Robots, 2017, 41, 1555-1573.	3.2	13
177	SoMo: Fast and Accurate Simulations of Continuum Robots in Complex Environments. , 2021, , .		13
178	Towards a multi-segment ambulatory microrobot. , 2010, , .		12
179	Feedback control of a legged microrobot with on-board sensing. , 2015, , .		12
180	Soft Robotics: Soft Somatosensitive Actuators via Embedded 3D Printing (Adv. Mater. 15/2018). Advanced Materials, 2018, 30, 1870106.	11.1	12

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181	A Fabrication Strategy for Reconfigurable Millimeterâ€Scale Metamaterials. Advanced Functional Materials, 2021, 31, 2103428.	7.8	12
182	An ultra-high precision, high bandwidth torque sensor for microrobotics applications. , 2011, , .		11
183	Model-free control of a flapping-wing flying microrobot. , 2013, , .		11
184	Single-loop control and trajectory following of a flapping-wing microrobot. , 2014, , .		11
185	High speed trajectory control using an experimental maneuverability model for an insect-scale legged robot. , 2017, , .		11
186	Soft curvature sensors for joint angle proprioception. , 2011, , .		11
187	Yaw Torque Authority for a Flapping-Wing Micro-Aerial Vehicle. , 2019, , .		10
188	Soft Sensors for Curvature Estimation under Water in a Soft Robotic Fish. , 2019, , .		10
189	Design and analysis of an integrated driver for piezoelectric actuators. , 2013, , .		9
190	A jumping robotic insect based on a torque reversal catapult mechanism. , 2013, , .		9
191	A Compact Laser-Steering End-Effector for Transoral Robotic Surgery. , 2019, , .		9
192	Ultra-gentle soft robotic fingers induce minimal transcriptomic response in a fragile marine animal. Current Biology, 2020, 30, R157-R158.	1.8	9
193	Design, fabrication and analysis of a body-caudal fin propulsion system for a microrobotic fish. , 2008, , .		8
194	Design and feedback control of a biologically-inspired miniature quadruped. , 2013, , .		8
195	Printing Strain Gauges on Surgical Instruments for Force Measurement1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.4	8
196	A bioinspired approach to torque control in an insect-sized flapping-wing robot. , 2014, , .		8
197	A Modular and Selfâ€Contained Fluidic Engine for Soft Actuators. Advanced Intelligent Systems, 2022, 4, 2100094.	3.3	8
198	Mechanically programmed self-folding at the millimeter scale. , 2014, , .		7

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199	A geometrically-amplified in-plane piezoelectric actuator for mesoscale robotic systems. , 2017, , .		7
200	Printing Strain Gauges on Intuitive Surgical da Vinci Robot End Effectors. , 2018, , .		7
201	The structural origins of brittle star arm kinematics: An integrated tomographic, additive manufacturing, and parametric modeling-based approach. Journal of Structural Biology, 2020, 211, 107481.	1.3	7
202	A Soft, Modular, and Bi-stable Dome Actuator for Programmable Multi-Modal Locomotion. , 2020, , .		7
203	An ultra-high precision, high bandwidth torque sensor for microrobotics applications. , 2011, , .		7
204	An Ambidextrous STarfish-Inspired Exploration and Reconnaissance Robot (The ASTER-bot). Soft Robotics, 2022, 9, 991-1000.	4.6	7
205	Toward understanding the communication in sperm whales. IScience, 2022, 25, 104393.	1.9	7
206	Controlling Soft Fluidic Actuators Using Soft DEA-Based Valves. IEEE Robotics and Automation Letters, 2022, 7, 8837-8844.	3.3	7
207	Wrist angle measurements using soft sensors. , 2014, , .		6
208	Rotating the heading angle of underactuated flapping-wing flyers by wriggle-steering. , 2015, , .		6
209	Smarter materials for smarter robots. Science Robotics, 2021, 6, .	9.9	6
210	The Chain-Link Actuator: Exploiting the Bending Stiffness of McKibben Artificial Muscles to Achieve Larger Contraction Ratios. IEEE Robotics and Automation Letters, 2022, 7, 542-548.	3.3	6
211	A high-force, high-stroke distal robotic add-on for endoscopy. , 2017, , .		5
212	An actuated gaze stabilization platform for a flapping-wing microrobot. , 2017, , .		5
213	A blade element approach to modeling aerodynamic flight of an insect-scale robot. , 2017, , .		5
214	A high speed motion capture method and performance metrics for studying gaits on an insect-scale legged robot. , 2017, , .		5
215	Soft Robotics: Textile Technology for Soft Robotic and Autonomous Garments (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	7.8	5
216	An Active Palm Enhances Dexterity of Soft Robotic In-Hand Manipulation. , 2021, , .		5

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217	The Role of Digit Arrangement in Soft Robotic In-Hand Manipulation. , 2021, , .		5
218	Controlling Palm-Object Interactions Via Friction for Enhanced In-Hand Manipulation. IEEE Robotics and Automation Letters, 2022, 7, 2258-2265.	3.3	5
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